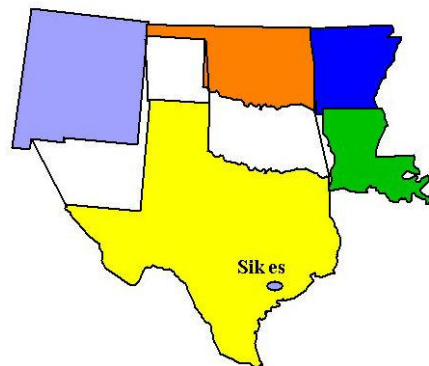


**SIKES DISPOSAL PITS  
SUPERFUND SITE  
Harris County, Texas**

**EPA Region 6  
EPA ID: TXD980513956  
Site ID: 0602488  
State Congressional District: 09**

**Contact: Ruben Moya 214-665-8318**

**Last Updated: August 2012**



## **Background**

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The Sikes Disposal Pits Superfund Site is located on 185 acres approximately 2 miles southwest of Crosby, Harris County, Texas. The site is bordered by U. S. Highway 90 on the south, the San Jacinto River on the west, and Jackson Bayou on the north. The only features remaining at the site related to the remedy are monitor wells and access roads. An individual security fence with locked gate secures each monitor well. Since completion of the remedy, vegetation has become reestablished. The site lies completely within the 100-year floodplain of the San Jacinto River, while some portions of the site are within the 10-year and 50-year floodplain. The site is frequently inundated by floodwaters. Surface water at the site ultimately drains to either the San Jacinto River or Jackson Bayou. The area immediately surrounding the site is largely undeveloped with numerous active and abandoned sand pits and low-lying swampy areas. There are several residences located north and northeast of the site, and the Riverdale Subdivision is located 500-feet southwest of the site. The Love Marina is located at the southwest corner of the site. The shallow aquifer is utilized by many local residents as a supply for drinking water.



From about 1955 until 1968, the Sikes site was operated as an illegal open dump. As a result, a wide variety of wastes including drums and bulk wastes were disposed onsite. The wastes were primarily chemical wastes, such as benzene, phenols, and other organic solvents. Approximately 2,000 55-gallon drums of waste and an indeterminable amount of bulk loads were discovered to have been disposed at the site. The drums were dumped along the sides of roads and bulldozed into pits and low mounds, while the bulk loads were dumped and/or pumped into pits and low-lying areas of the site. Hydrocarbon odors from the site became such a nuisance that local residents at the time complained to both President

Lyndon Johnson and Congress. Much of the wastes were deposited into what was known as the main waste pit. The main waste pit was surrounded by a dike, which was breached by flooding and resulted in the transporting of the wastes across a large low-lying area east of the main waste pit known as the overflow area.

The EPA conducted a removal at the site in June 1983. This removal action resulted in the removal of approximately 440 cubic yards of buried phenolic tars. A Record of Decision (ROD) for the site was issued on September 18, 1986, to address the threats posed by the site. The remedy selected in the ROD included excavation of contaminated soil and sludge, onsite incineration of excavated soil and sludge, onsite disposal of residue ash from incineration, backfilling of pits and excavated areas, treatment of contaminated surface water, institutional controls to prevent use of contaminated groundwater, and monitoring of the upper and lower aquifers.



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## Current Status

The Texas Commission on Environmental Quality (TCEQ) is responsible for operation and maintenance activities at the Site. These activities include semi-annual monitoring of shallow monitor wells and annual monitoring of the deep monitoring wells. TCEQ recently completed another round of ground water sampling.

The previous five-year review of the Site was completed on September 27, 2006. The five-year review determined that the remedy for the Sikes Site is currently protective of human health and the environment

and will remain so provided certain actions are taken, including creation of institutional controls to prohibit use of ground water for all properties at the Site. The TCEQ is currently developing institutional controls for these additional properties. The long-term protectiveness of the containment remedy will continue to be verified by sampling and inspections conducted by TCEQ.

A five-year review is scheduled for 2016. Past 5yr Reviews have determined that the remedy was protective of human health and the environment and would remain so provided action items identified were addressed/implemented; these items are currently being addressed/implemented and should be completed by the end of FY 12.

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## Benefits

The cleanup actions completed reduced the threats from the Site. These former threats included direct contact with contaminated soils, sludges, and surface water; consumption of contaminated ground water; and inhalation of toxic organic compounds. A total of 496,253 tons of contaminated soil and sludge, and 350 million gallons of contaminated water were treated through the incineration remedy.

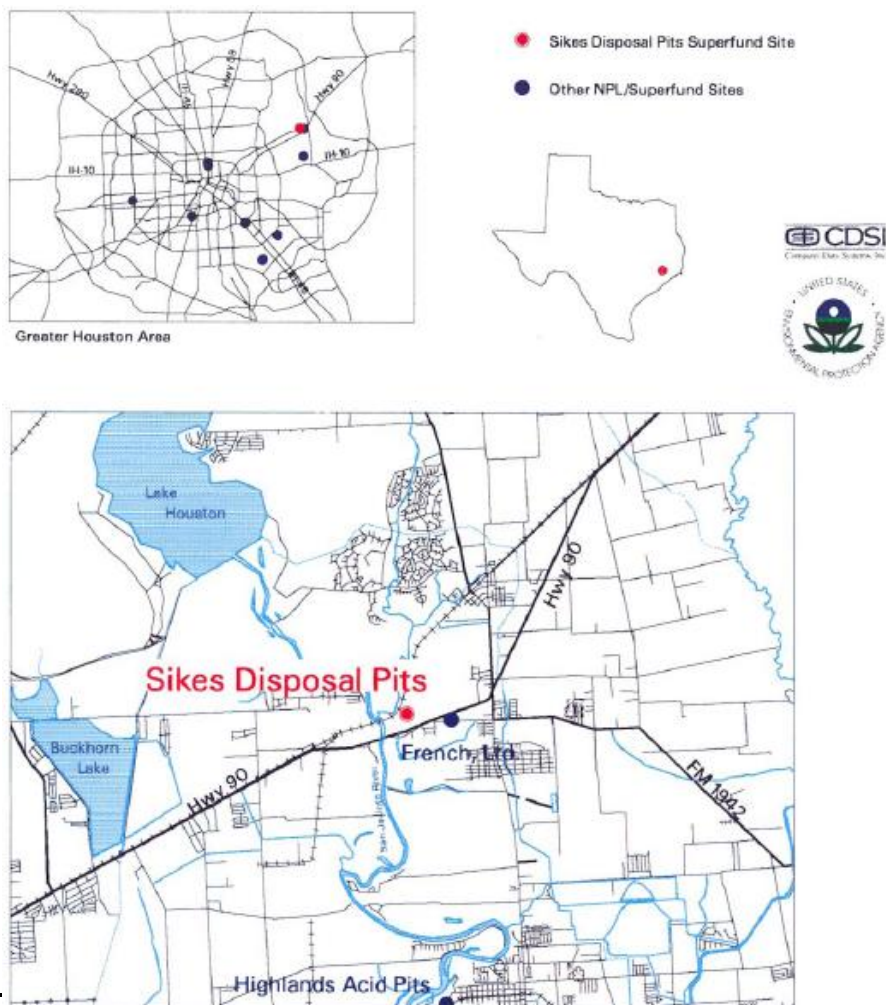
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## National Priorities Listing (NPL) History

Proposal Date: October 23, 1981  
Final Listing Date: September 8, 1983

- Population:** Approximately 10,000 people reside in Crosby and the surrounding communities. The Riverdale subdivision, the closest residential development, is 500-feet southwest of the Site.
- Setting:** The Site covers approximately 185-acres. It is bordered by the San Jacinto River on the west, Jackson Bayou on the north, and old U.S. Highway 90 on the south. The Site is entirely located within the 100-year flood plain of the San Jacinto River, and portions of the Site are within the 10-year and 50-year flood plains. The Site is frequently inundated. Areas around the Site are largely undeveloped with numerous sand pits and swampy areas. The ground water monitoring wells are the only remaining structures relating to the remedy, and each is secured by an individual fence with a locked gate. The Site currently includes two occupants including one residence and the Love Marina.
- Photos:** [Site](#)
- Hydrology:** Soils at the Site consist of river alluvium overlying Texas Coastal Plain deposits. Shallow water-bearing zones occur in the alluvium, which varies in thickness between 17 and 34-feet. Ground water in the shallow aquifer flows to the southwest. A deeper water-producing zone is found in a sandy-silt zone of the Coastal Plain deposits at about 65-foot below the alluvial aquifer. A clay stratum separates these two uppermost aquifers. The Chicot and Evangeline Aquifers occur beneath several hundred feet of clay, which is below the Coastal Plain aquifer.

## Site Map



**SIKES DISPC** Area surrounding Sikes Disposal Pits site.

Sources: 1992 US Census TIGER/Line Files  
EPA Region 6, Superfund GIS coverage, 1998

Printed on March 27, 1998

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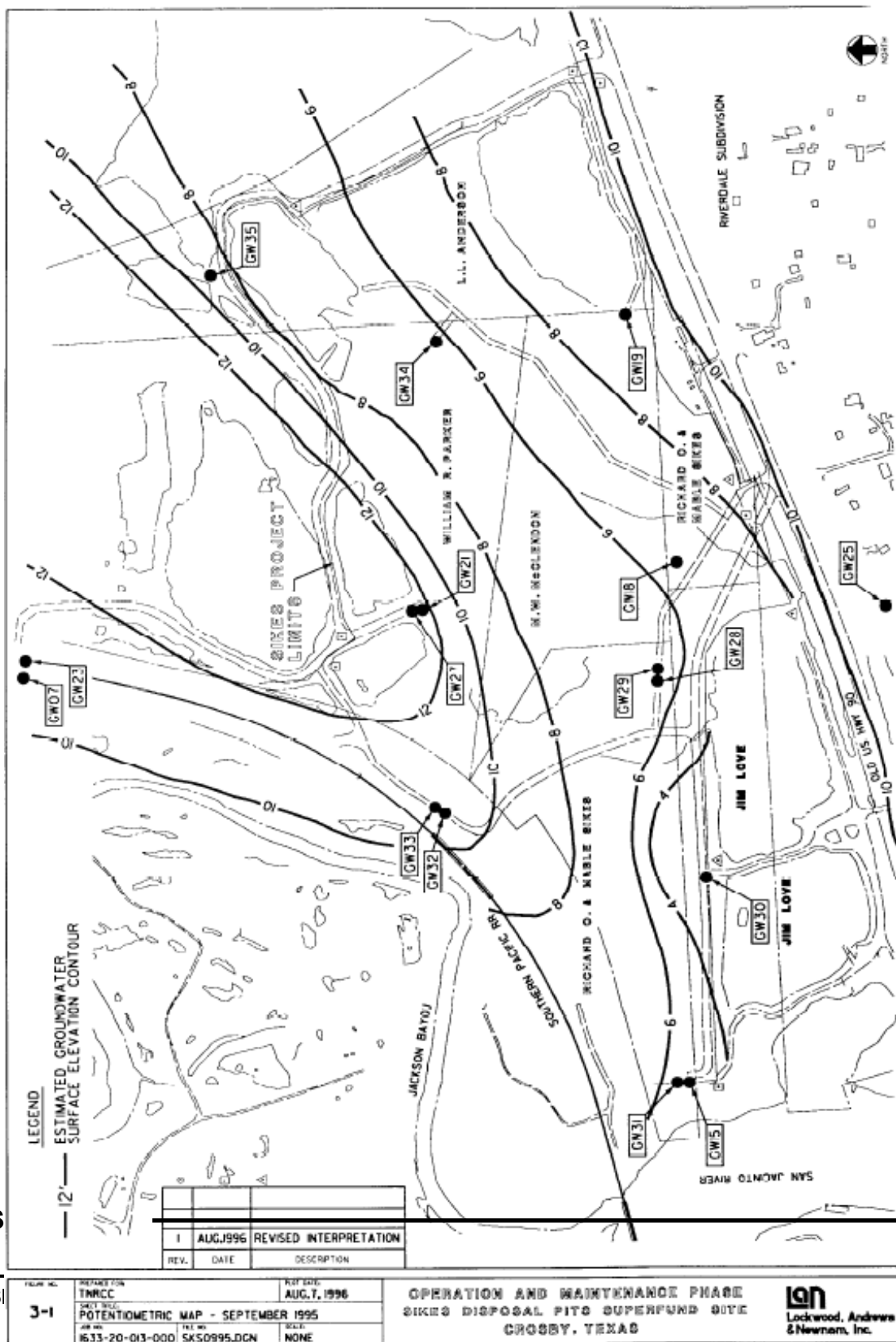


Figure 2 - Site Map  
 Sikes Disposal Pits Superfund Site  
 Crosby, Harris County, Texas

## Wastes and Volumes

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Beginning in the early 1960's until 1967, a variety of chemical wastes from area petrochemical companies was disposed in on-site unlined sand pits. The wastes were mainly petroleum and chemical wastes, such as benzene, toluene, xylene, creosote, phenols, olefins, and other organic solvents. The wastes also contained metals such as arsenic, mercury, cadmium, chromium, and lead. A sludge overflow extended eastward over a large area from the main waste pit.

Wastes leaching from the pits heavily contaminated ground water in the shallow alluvium aquifer. The deeper Coastal Plain aquifer contained trace levels of several volatile organic compounds. Waste volumes at the Site were approximately as follows: 350 million gallons of contaminated ground and surface water; 496,000 tons of organic sludge and contaminated soils; and 2000 drums of mixed waste.

The site's Environmental Indicator status is human exposure under control and ground water migration under control.

## Health Considerations

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Prior to remediation, potential human health problems could be caused by contact or ingestion of Site contaminants. Fishing and hunting activities occur routinely around the Site. Surface water and ground water were contaminated. Some local residents use the shallow aquifer as a supply for drinking water. The underlying Chicot and Evangeline Aquifers were determined to be in no danger from the contamination.

## Record of Decision

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The Record of Decision (ROD) was signed on September 18, 1986. The selected remedy including the following:

- Excavation of soil and sludge containing more than 10 parts-per-million of volatile organic compounds.
- On-site incineration of soil and sludge.
- On-site disposal of residue ash from incineration.
- Backfilling of pits and excavated areas.
- Treatment of contaminated surface water.
- Prevent use of contaminated ground water while it naturally attenuates (Institutional Controls).
- Monitoring of the upper and lower aquifers.

Construction completion was achieved on January 30, 1995. Excavation and incineration of the contaminated materials, and Site restoration, were completed in June 1994. The incineration ash was backfilled on-site and covered with 18-inches of clean soil and 6-inches of topsoil. Afterwards, the incinerator facilities were removed and the Site was planted with local grasses.

## Community Involvement

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Community Involvement Plan:	Revised December 1987.
Open Houses:	January 1988; January 1989; October 1990; February 1991; January 1992; and November 1992.
Proposed Plan and Public Meeting:	August 1986
Technical Assistance Grant:	Availability Notice – April 1988; August 1990

Final Applications Received:	Barrett-Crosby Civic League; August 1990.
Grant Award:	March 4, 1991
Current Status:	Grant was not used; grant withdrawn and closed in 1998.
Information Repository:	Crosby Public Library 35 Hare Road Crosby, Texas 77532 (281) 328-3535

## Site Contacts

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EPA Remediation Project Manager:	Ruben Moya	(214) 665-2755
State Project Manager:	Lam Tran	(713) 767-3559
EPA Public Liaison	Donn R. Walters	(214) 665-6483
State Community Relations Coordinator	John Flores	(512) 239-5674
EPA Site Attorney:	Anne Foster	(214) 665-2169
EPA Toll-Free Telephone Number:		(800) 533-3508